Marco Guerrini

List of Publications by Year
in descending order

107 papers	4,385 citations	101496 36 h-index	123376 61 g-index
116 all docs	116 docs citations	116 times ranked	3750 citing authors

#	Article	IF	Citations
1	Structural variation in the linkage region of pharmaceutical heparin arising from oxidative treatments during manufacture. Carbohydrate Research, 2022, 514, 108540.	1.1	0
2	NMR spectroscopy and chemometric models to detect a specific non-porcine ruminant contaminant in pharmaceutical heparin. Journal of Pharmaceutical and Biomedical Analysis, 2022, 214, 114724.	1.4	9
3	Pentosan Polysulfate Inhibits Attachment and Infection by SARS-CoV-2 In Vitro: Insights into Structural Requirements for Binding. Thrombosis and Haemostasis, 2022, 122, 984-997.	1.8	12
4	Glycosaminoglycans from Litopenaeus vannamei Inhibit the Alzheimerâ€™s Disease Î² Secretase, BACE1. Marine Drugs, 2021, 19, 203.	2.2	8
5	Saturated tetrasaccharide profile of enoxaparin. An additional piece to the heparin biosynthesis puzzle. Carbohydrate Polymers, 2021, 273, 118554.	5.1	1
6	MD simulation of the interaction between sialoglycans and the second sialic acid binding site of influenza A virus N1 neuraminidase. Biochemical Journal, 2021, 478, 423-441.	1.7	2
7	Efficient selective deacetylation of complex oligosaccharides using the neutral organotin catalyst [tBu2SnOH(Cl)]2. Carbohydrate Research, 2020, 498, 108172.	1.1	4
8	Characterization of an Antibody Recognizing the Conserved Inner Core of <i>Pseudomonas aeruginosa</i> Lipopolysaccharides. Biochemistry, 2020, 59, 4202-4211.	1.2	4
9	Degeneracy of the Antithrombin Binding Sequence in Heparin: 2â€Oâ€Sulfated Iduronic Acid Can Replace the Critical Glucuronic Acid. Chemistry - A European Journal, 2020, 26, 11814-11818.	1.7	9
10	Heparin Inhibits Cellular Invasion by SARS-CoV-2: Structural Dependence of the Interaction of the Spike S1 Receptor-Binding Domain with Heparin. Thrombosis and Haemostasis, 2020, 120, 1700-1715.	1.8	228
11	Inhibition of BACE1, the Î²-secretase implicated in Alzheimerâ€™s disease, by a chondroitin sulfate extract from Sardina pilchardus. Neural Regeneration Research, 2020, 15, 1546.	1.6	16
12	Molecular Aspects of Heparanase Interaction with Heparan Sulfate, Heparin and Glycol Split Heparin. Advances in Experimental Medicine and Biology, 2020, 1221, 169-188.	0.8	2
13	1D and 2D-HSQC NMR: Two Methods to Distinguish and Characterize Heparin From Different Animal and Tissue Sources. Frontiers in Medicine, 2019, 6, 142.	1.2	14
14	A Glycosaminoglycan Extract from Portunus pelagicus Inhibits BACE1, the Î² Secretase Implicated in Alzheimerâ€™s Disease. Marine Drugs, 2019, 17, 293.	2.2	6
15	SAX-HPLC and HSQC NMR Spectroscopy: Orthogonal Methods for Characterizing Heparin Batches Composition. Frontiers in Medicine, 2019, 6, 78.	1.2	13
16	NMR in the Characterization of Complex Mixture Drugs. AAPS Advances in the Pharmaceutical Sciences Series, 2019, , 115-137.	0.2	0
17	Multivariate analysis applied to complex biological medicines. Faraday Discussions, 2019, 218, 303-316.	1.6	9
18	Introduction to the Molecules Special Edition Entitled â€˜Heparan Sulfate and Heparin: Challenges and Controversiesâ€™: Some Outstanding Questions in Heparan Sulfate and Heparin Research. Molecules, 2019, 24, 1399.	1.7	10

#	Article	IF	Citations
19	Recognition and Conformational Properties of an Alternative Antithrombin Binding Sequence Obtained by Chemoenzymatic Synthesis. ChemBioChem, 2018, 19, 1178-1188.	1.3	11
20	Fine structural characterization of sulodexide. Journal of Pharmaceutical and Biomedical Analysis, 2018, 156, 67-79.	1.4	21
21	Qualification of HSQC methods for quantitative composition of heparin and low molecular weight heparins. Journal of Pharmaceutical and Biomedical Analysis, 2017, 136, 92-105.	1.4	48
22	Investigating the relationship between temperature, conformation and calcium binding in heparin model oligosaccharides. Carbohydrate Research, 2017, 438, 58-64.	1.1	7
23	Combining NMR Spectroscopy and Chemometrics to Monitor Structural Features of Crude Hep-arin. Molecules, 2017, 22, 1146.	1.7	26
24	Structural Characterization of the Low-Molecular-Weight Heparin Dalteparin by Combining Different Analytical Strategies. Molecules, 2017, 22, 1051.	1.7	12
25	Characterization of Danaparoid Complex Extractive Drug by an Orthogonal Analytical Approach. Molecules, 2017, 22, 1116.	1.7	13
26	Molecular Weights of Bovine and Porcine Heparin Samples: Comparison of Chromatographic Methods and Results of a Collaborative Survey. Molecules, 2017, 22, 1214.	1.7	14
27	Investigating Glycol-Split-Heparin-Derived Inhibitors of Heparanase: A Study of Synthetic Trisaccharides. Molecules, 2016, 21, 1602.	1.7	15
28	Uncovering the Relationship between Sulphation Patterns and Conformation of Iduronic Acid in Heparan Sulphate. Scientific Reports, 2016, 6, 29602.	1.6	53
29	Nuclear Magnetic Resonance and Molecular Dynamics Simulation of the Interaction between Recognition Protein H7 of the Novel Influenza Virus H7N9 and Glycan Cell Surface Receptors. Biochemistry, 2016, 55, 6605-6616.	1.2	12
30	Atomic Details of the Interactions of Glycosaminoglycans with Amyloid-Î² Fibrils. Journal of the American Chemical Society, 2016, 138, 8328-8331.	6.6	48
31	Structural peculiarity and antithrombin binding region profile of mucosal bovine and porcine heparins. Journal of Pharmaceutical and Biomedical Analysis, 2016, 118, 52-63.	1.4	36
32	Differentiation of Generic Enoxaparins Marketed in the United States by Employing NMR and Multivariate Analysis. Analytical Chemistry, 2015, 87, 8275-8283.	3.2	42
33	Antithrombin-binding oligosaccharides: structural diversities in a unique function?. Glycoconjugate Journal, 2014, 31, 409-416.	1.4	29
34	A heparin-like glycosaminoglycan from shrimp containing high levels of 3-O-sulfated d-glucosamine groups in an unusual trisaccharide sequence. Carbohydrate Research, 2014, 390, 59-66.	1.1	30
35	Structural features of glycol-split low-molecular-weight heparins and their heparin lyase generated fragments. Analytical and Bioanalytical Chemistry, 2014, 406, 249-265.	1.9	27
36	Monosaccharide composition of glycans based on Q-HSQC NMR. Carbohydrate Polymers, 2014, 104, 34-41.	5.1	33

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37	Insights into the Human Glycan Receptor Conformation of 1918 Pandemic Hemagglutininâ€"Glycan Complexes Derived from Nuclear Magnetic Resonance and Molecular Dynamics Studies. Biochemistry, 2014, 53, 4122-4135.	1.2	14
38	Conformational changes of 1-4-glucopyranosyl residues of a sulfated CC linked hexasaccharide. Carbohydrate Research, 2014, 389, 134-140.	1.1	2
39	Human (Î±2â†'6) and Avian (Î±2â†'3) Sialylated Receptors of Influenza A Virus Show Distinct Conformations and Dynamics in Solution. Biochemistry, 2013, 52, 7217-7230.	1.2	45
40	Characterizing the Microstructure of Heparin and Heparan Sulfate Using <i>N</i>-Sulfoglucosamine ¹H and ¹⁵N NMR Chemical Shift Analysis. Analytical Chemistry, 2013, 85, 1247-1255.	3.2	30
41	Unravelling Structural Information from Complex Mixtures Utilizing Correlation Spectroscopy Applied to HSQC Spectra. Analytical Chemistry, 2013, 85, 7487-7493.	3.2	24
42	An unusual antithrombin-binding heparin octasaccharide with an additional 3-O-sulfated glucosamine in the active pentasaccharide sequence. Biochemical Journal, 2013, 449, 343-351.	1.7	49
43	Heparin Dodecasaccharide Containing Two Antithrombin-binding Pentasaccharides. Journal of Biological Chemistry, 2013, 288, 25895-25907.	1.6	40
44	A zinc complex of heparan sulfate destabilises lysozyme and alters its conformation. Biochemical and Biophysical Research Communications, 2012, 425, 794-799.	1.0	7
45	How To Find a Needle (or Anything Else) in a Haystack: Two-Dimensional Correlation Spectroscopy-Filtering with Iterative Random Sampling Applied to Pharmaceutical Heparin. Analytical Chemistry, 2012, 84, 6841-6847.	3.2	22
46	Following Proteinâ€"Glycosaminoglycan Polysaccharide Interactions with Differential Scanning Fluorimetry. Methods in Molecular Biology, 2012, 836, 171-182.	0.4	4
47	Low-Molecular-Weight Heparins: Differential Characterization/Physical Characterization. Handbook of Experimental Pharmacology, 2012, , 127-157.	0.9	19
48	High-sensitivity visualisation of contaminants in heparin samples by spectral filtering of 1H NMR spectra. Analyst, The, 2011, 136, 1390.	1.7	23
49	Construction and use of a library of bona fide heparins employing 1H NMR and multivariate analysis. Analyst, The, 2011, 136, 1380.	1.7	26
50	A robust method to quantify low molecular weight contaminants in heparin: detection of tris(2-n-butoxyethyl) phosphate. Analyst, The, 2011, 136, 2330.	1.7	16
51	Low-molecular-weight heparin from Cu2+ and Fe2+ Fenton type depolymerisation processes. Thrombosis and Haemostasis, 2010, 103, 613-622.	1.8	20
52	Characterization and binding activity of the chondroitin/dermatan sulfate chain from Endocan, a soluble endothelial proteoglycan. Glycobiology, 2010, 20, 1380-1388.	1.3	57
53	Comparable stabilisation, structural changes and activities can be induced in FGF by a variety of HS and non-GAG analogues: implications for sequence-activity relationships. Organic and Biomolecular Chemistry, 2010, 8, 5390.	1.5	29
54	Effects on Molecular Conformation and Anticoagulant Activities of 1,6-Anhydrosugars at the Reducing Terminal of Antithrombin-Binding Octasaccharides Isolated from Low-Molecular-Weight Heparin Enoxaparin. Journal of Medicinal Chemistry, 2010, 53, 8030-8040.	2.9	44

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55	Glycosaminoglycan origin and structure revealed by multivariate analysis of NMR and CD spectra. Glycobiology, 2009, 19, 52-67.	1.3	50
56	Orthogonal analytical approaches to detect potential contaminants in heparin. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16956-16961.	3.3	90
57	Cations Modulate Polysaccharide Structure To Determine FGFâˆ'FGFR Signaling: A Comparison of Signaling and Inhibitory Polysaccharide Interactions with FGF-1 in Solution. Biochemistry, 2009, 48, 4772-4779.	1.2	16
58	The Tainted Heparin Story: An Update. Thrombosis and Haemostasis, 2009, 102, 907-911.	1.8	29
59	Structural features of low-molecular-weight heparins affecting their affinity to antithrombin. Thrombosis and Haemostasis, 2009, 102, 865-873.	1.8	76
60	Oversulfated chondroitin sulfate is a contaminant in heparin associated with adverse clinical events. Nature Biotechnology, 2008, 26, 669-675.	9.4	559
61	Minimum FGF2 Binding Structural Requirements of Heparin and Heparan Sulfate Oligosaccharides As Determined by NMR Spectroscopy. Biochemistry, 2008, 47, 13862-13869.	1.2	57
62	Antithrombin-binding Octasaccharides and Role of Extensions of the Active Pentasaccharide Sequence in the Specificity and Strength of Interaction. Journal of Biological Chemistry, 2008, 283, 26662-26675.	1.6	72
63	Interaction of Heparins with Fibroblast Growth Factors: Conformational Aspects. Current Pharmaceutical Design, 2007, 13, 2045-2056.	0.9	29
64	Influence of substitution pattern and cation binding on conformation and activity in heparin derivatives. Glycobiology, 2007, 17, 983-993.	1.3	66
65	Low Molecular Weight Heparins: Structural Differentiation by Bidimensional Nuclear Magnetic Resonance Spectroscopy. Seminars in Thrombosis and Hemostasis, 2007, 33, 478-487.	1.5	96
66	Characterization of di- and monosulfated, unsaturated heparin disaccharides with terminal N-sulfated 1,6-anhydro-Î²-d-glucosamine or N-sulfated 1,6-anhydro-Î²-d-mannosamine residues. Carbohydrate Research, 2007, 342, 835-842.	1.1	26
67	Inclusion complex characterization between progesterone and hydroxypropyl-Î²-cyclodextrin in aqueous solution by NMR study. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2007, 57, 317-321.	1.6	13
68	Conformational transitions induced in heparin octasaccharides by binding with antithrombin III. Biochemical Journal, 2006, 399, 191-198.	1.7	48
69	Synthesis and characterisation of hexa- and tetrasaccharide mimics from acetobromomaltotriose and acetobromomaltose, and of C-disaccharide mimics from acetobromoglucose, obtained by electrochemical reduction on silver. Tetrahedron: Asymmetry, 2005, 16, 243-253.	1.8	17
70	Complex glycosaminoglycans: profiling substitution patterns by two-dimensional nuclear magnetic resonance spectroscopy. Analytical Biochemistry, 2005, 337, 35-47.	1.1	118
71	Dynamic properties of biologically active synthetic heparin-like hexasaccharides. Glycobiology, 2005, 15, 1008-1015.	1.3	33
72	Identification and Characterization of Heparin/Heparan Sulfate Binding Domains of the Endoglycosidase Heparanase. Journal of Biological Chemistry, 2005, 280, 20457-20466.	1.6	118

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73	Structural and Conformational Aspects of the Anticoagulant and Antithrombotic Activity of Heparin and Dermatan Sulfate. Current Pharmaceutical Design, 2004, 10, 939-949.	0.9	73
74	Structure of a heteroxylan of gum exudate of the palm Scheelea phalerata (uricuri). Phytochemistry, 2004, 65, 2347-2355.	1.4	28
75	Undersulfated and Glycol-Split Heparins Endowed with Antiangiogenic Activity. Journal of Medicinal Chemistry, 2004, 47, 838-848.	2.9	80
76	Low-Molecular-Weight Heparin and Dermatan Sulfate End Group-Labeled with Tyramine and Fluorescein. Biochemical and Biological Characterization of the Fluorescent-Labeled Heparin Derivative. Seminars in Thrombosis and Hemostasis, 2002, 28, 343-354.	1.5	6
77	Active Conformations of Glycosaminoglycans. NMR Determination of the Conformation of Heparin Sequences Complexed with Antithrombin and Fibroblast Growth Factors in Solution. Seminars in Thrombosis and Hemostasis, 2002, 28, 325-334.	1.5	33
78	Cycloartane and Oleanane Saponins from EgyptianAstragalusspp. as Modulators of Lymphocyte Proliferation. Planta Medica, 2002, 68, 986-994.	0.7	37
79	A novel computational approach to integrate NMR spectroscopy and capillary electrophoresis for structure assignment of heparin and heparan sulfate oligosaccharides. Glycobiology, 2002, 12, 713-719.	1.3	46
80	Short Heparin Sequences Spaced by Glycol-Split Uronate Residues Are Antagonists of Fibroblast Growth Factor 2 and Angiogenesis Inhibitors. Biochemistry, 2002, 41, 10519-10528.	1.2	76
81	Minimal Heparin/Heparan Sulfate Sequences for Binding to Fibroblast Growth Factor-1. Biochemical and Biophysical Research Communications, 2002, 292, 222-230.	1.0	52
82	Human milk oligosaccharides: an enzymatic protection step simplifies the synthesis of 3â€²- and 6â€²-O-sialyllactose and their analogues. Carbohydrate Research, 2002, 337, 473-483.	1.1	15
83	Conformation of heparin pentasaccharide bound to antithrombin III. Biochemical Journal, 2001, 359, 265-272.	1.7	101
84	Conformation of heparin pentasaccharide bound to antithrombin III. Biochemical Journal, 2001, 359, 265.	1.7	57
85	A Rational Approach to Heparin-Related Fragments â^' Synthesis of Differently Sulfated Tetrasaccharides as Potential Ligands for Fibroblast Growth Factors. European Journal of Organic Chemistry, 2001, 2001, 2727-2734.	1.2	37
86	In Vitro Antiplasmodial Activity of Extracts ofTristaniopsisSpecies and Identification of the Active Constituents:Â Ellagic Acid and 3,4,5-Trimethoxyphenyl-(6â€˜-O-galloyl)-O-Î²-d-glucopyranoside. Journal of Natural Products, 2001, 64, 603-607.	1.5	69
87	Cycloartane saponins from Astragalus peregrinus as modulators of lymphocyte proliferation. FÃ¬toterapÃ¬Â¢, 2001, 72, 894-905.	1.1	37
88	Preserving the Original Heparin Structure of a Novel Low Molecular Weight Heparin by Î³-Irradiation. Arzneimittelforschung, 2001, 51, 806-813.	0.5	7
89	Combined Quantitative 1H and 13C Nuclear Magnetic Resonance Spectroscopy for Characterization of Heparin Preparations. Seminars in Thrombosis and Hemostasis, 2001, 27, 473-482.	1.5	78
90	Effect of substitution pattern on 1H, 13C NMR chemical shifts and 1JCH coupling constants in heparin derivatives. Carbohydrate Research, 2000, 329, 239-247.	1.1	54

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91	Acetobromomaltose, a New Source of Carbohydrate Radicals. EPR Characterisation of Maltosyl and 2-Deoxymaltos-2-yl Radicals and Syntheses of Tetrasaccharide-like Mimics, Maltal, 3-Î±-Maltosyl Propiononitrile, 1,5-Anhydromaltitol and 2-Deoxymaltopyranoside. Tetrahedron, 2000, 56, 6291-6297.	1.0	6
92	A novel heparan sulphate with high degree of N-sulphation and high heparin cofactor-II activity from the brine shrimp Artemia franciscana. International Journal of Biological Macromolecules, 2000, 27, 49-57.	3.6	30
93	Synthesis of disaccharidic sub-units of a new series of heparin related oligosaccharides. Tetrahedron, 1999, 55, 9867-9880.	1.0	33
94	Structure of heparin-derived tetrasaccharide complexed to the plasma protein antithrombin derived from NOEs,J-couplings and chemical shifts. FEBS Journal, 1999, 261, 789-801.	0.2	32
95	Electrochemical reduction of halogenosugars on silver: a new approach to C-disaccharide-like mimics. Chemical Communications, 1998, , 1575-1576.	2.2	28
96	Synthesis and Biological Effects ofN-Alkylamine-Labeled Low-Molecular-Mass Dermatan Sulfate. Seminars in Thrombosis and Hemostasis, 1997, 23, 99-107.	1.5	1
97	C-Glucosyl quinones and related spacer-connected C-disaccharide. Chemical Communications, 1997, , 1617-1618.	2.2	6
98	Synthesis of Stable Analogues of Glyceroglycolipids. Tetrahedron, 1997, 53, 6163-6170.	1.0	18
99	A galactosphingolipid from the lichen, Ramalina celastri. Phytochemistry, 1997, 45, 651-653.	1.4	10
100	Motional properties of E. Coli polysaccharide K5 in aqueous solution analyzed by NMR relaxation measurements. Carbohydrate Research, 1997, 300, 69-76.	1.1	26
101	Modifications under basic conditions of the minor sequences of heparin containing 2,3 or 2,3,6 sulfatedd-glucosamine residues. Carbohydrate Research, 1997, 302, 103-108.	1.1	19
102	1H and 13C NMR spectral assignments of the major sequences of twelve systematically modified heparin derivatives. Carbohydrate Research, 1996, 294, 15-27.	1.1	141
103	Differentiation of Beef and Pig Mucosal Heparins by NMR Spectroscopy. Thrombosis and Haemostasis, 1995, 74, 1205-1205.	1.8	18
104	Semisynthesis and Analysis of Lipophilically Modified Unfractionated and Low Molecular Mass Heparins. Seminars in Thrombosis and Hemostasis, 1994, 20, 182-192.	1.5	3
105	Nuclear Magnetic Resonance Analysis of Human Urine: Influence of Intravenous and Oral Administration of Glycosaminoglycans. Seminars in Thrombosis and Hemostasis, 1994, 20, 144-151.	1.5	2
106	Heparin-like compounds prepared by chemical modification of capsular polysaccharide from E. coli K5. Carbohydrate Research, 1994, 263, 271-284.	1.1	105
107	CHAPTER 14. New Methods for the Analysis of Heterogeneous Polysaccharides â€“ Lessons Learned from the Heparin Crisis. New Developments in NMR, 0, , 305-334.	0.1	1